

IPS Element	Competency	Subcompetency #1	Subcompetency #2	Subcompetency #3	Subcompetency #4	Subcompetency #5
Design Interface	DIN - Understand how design interface integrates and impacts the other Product Support Elements, program functional activities, business case analysis, and program deliverables.	Understand how design interface impacts and is impacted by each Product Support Element.	Understand how design interface impacts and is impacted by each program functional area.	Understand applicable Title X statutory requirements, relevant laws and DoD policy governing design interface and Reliability, Availability & Maintainability (RAM) activities.	Understand and develop design interface inputs to the acquisition process milestone deliverables.	Understand how program performance based metrics impact and are impacted by design interface activities.
Design Interface	DIN - Drive optimization of affordability and readiness with organizational processes, capabilities, incentivizations and strategies.	Identify and integrate all major design interface government and commercial stakeholders, Service advocates and related organizations through focused strategies and incentivizations to meet program requirements.	Establish supportability design criteria early in the acquisition life cycle to consider life-cycle support requirements for system evolution throughout the system's life span.	Apply design interface methodologies and processes to the program acquisition process.	Identify and evaluate engineering change proposals and value engineering change proposals to drive optimization of system readiness and affordability.	Evaluate system and support equipment producibility factors, tools and techniques to optimize acquisition risk, readiness and affordability.
Design Interface	DIN - Incorporate modeling and simulation, logistics demonstrations and other applied supportability analysis methods to forecast and evaluate performance based outcomes.	Identify and plan for the usage of supportability analysis throughout the program.	Identify cost drivers of the specific weapon system early in the life of the acquisition program to manage life cycle affordability.	Ensure technical data packages include necessary and sufficient information to perform design interface activities to optimize readiness and affordability.	Establish a failure reporting process that integrates all program activities to include field operations, test, supply chain, etc.	Establish a system health management system that provides information to continue improving readiness and affordability.
Design Interface	DIN - Drive design to optimize suitability, survivability and vulnerability under environmental and other external conditions.	Design for system suitability maximizing the degree to which a system can be put into use under required operational conditions.	Evaluate personnel and equipment survivability and vulnerability factors to include battle damage repair forecasts under operational conditions.	Evaluate product support strategies under harsh environmental conditions.		
Design Interface	DIN - Use engineering and supportability analysis to validate performance based outcome improvements.	Evaluate and maximize the use of modeling and simulation tools, techniques, and results to forecast and validate design interface options for optimizing readiness and affordability.	Determine and pursue testing and logistics demonstrations to verify and validate the optimum usage and integration of all integrated product support elements.	Conduct post-production and post-fielding reviews to validate sustainment strategies, design interface solutions and to recommend improvements.	Conduct trade studies to evaluate Reliability, Availability and Maintainability (RAM) and supportability analysis against affordability and weapon system readiness goals.	Evaluate and introduce new technologies which have high probability and low risk for improving system readiness and affordability.

Design Interface	DIN - Design for reliability, availability, maintainability, affordability and life cycle cost reduction (RAM-C).	Establish a reliability strategy and a life cycle reliability growth program to identify and eliminate failure modes.	Establish a life cycle availability strategy and metrics for both materiel availability and operational availability.	Establish a maintainability strategy to reduce cycle time addressing accessibility, modularity and testability.	Ensure that system performance and program life cycle cost are properly balanced, leading to the materiel capability developed being operationally effective, suitable, and affordable for the warfighter.	Evaluate the impact of Reliability, Availability, and Maintainability (RAM) design on system performance and supportability.
Design Interface	DIN - Incorporate net-centric capabilities to achieve interoperability and standardization of data and information.	Establish a net-centric capability to ensure the timely, accurate, and complete exchange and use of information to satisfy information needs for a given capability for operational and sustainment purposes.	Ensure the system can operate, train, integrate, and provide services with other systems, units or forces to optimize readiness and affordability.	Lead efforts to base the system's design on open, commercially supported interface standards to incorporate the customer and supplier base.	Focus the design interface process to consider life-cycle support requirements up front, supporting system evolution throughout the system's life span.	Establish standardization of materiel, facilities, and practices through requirements stated in performance terms.
Design Interface	DIN - Design for Human Systems Integration factors.	Design systems to achieve Human System Integration goals at optimal infrastructure and resources levels.	Define the user performance characteristics based on the system description, projected characteristics of target occupational specialties, and recruitment and retention trends.	Determine the most efficient and cost-effective mix of DoD manpower and contract support.	Develop effective options for individual, collective, and joint training for operators, maintainers and support personnel.	Institute measures to prevent Environmental, Safety and Occupational Hazards (ESOH) and manage ESOH hazards where they cannot be avoided.
Design Interface	DIN - Design for energy efficiency, re-usability, disposability and minimum environmental impacts.	Plan, design, and construct solutions that enhance the weapon system's environmental and energy performance while optimizing readiness and affordability.	Plan for maximizing re-use of products, infrastructure and data.	Design for disposal processes to meet DoD policy as well as federal and local laws.	Design for demilitarization.	